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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER	
PATEL, ASHOKKUMAR B	
ART UNIT	**PAPER NUMBER**
2154	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/941,254	HOCHMUTH ET AL.	
	Examiner	Art Unit	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are subject to examination.

Response to Arguments

2. Applicant's arguments, see pages 9 and 10 (video signal), filed 11/07/2006, with respect to the rejection(s) of claim(s) 1-14 and 15-20 under 35 USC § 103 and 35 USC § 102 respectively, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hendricks et al. (US 6, 675, 386 B1) for claims 1-5, 7-12 and 15-20, Hendricks in view of Mou for claim 6, and Hendricks in view of Boe for claims 13 and 14.

Applicant's remark:

"The undersigned notes the MPEP's admonition against piecemeal examination. Such piecemeal examination imposes an undue cost on applicants in the examination process."

Examiner's response:

a. First Office action was mailed on 1/18/2005 by the office with the rejection of all claims.

b. Second Office action was mailed on 09/28/2005 by the office with the rejection of all claims.

c. Third office action was mailed on 02/16/2006 with the Examiner's response to the applicant's arguments in response to the second office action with the same rejection (rejection of all claims with the reference of the second office action.)

d. Fourth office action was mailed on 08/07/2006 with Examiner's response to a declaration filed by the Applicant on May 15, 2006 under 37 CFR 1.131 which was found to be effective. Again a rejection was provided for all claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-12 and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1).

Referring to claim 1,

Hendricks teaches an apparatus (Figs. 9A and 9B, element 140) for communicating graphics (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs,

television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") between at least two remotely-located computers (First: Fig. 3A elements 104,134,106; Second: Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310) across a computer network (Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

an input for receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL") output from a graphics card of a source computer (Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed and provided to data communications network 120. This compressed video is

subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples." **Note:** Source computers, such as element 104, 134 and 106 are anticipated to have graphic cards as they have video signal acquiring and transmitting capabilities. Please also note that this inherency is consistent with the evidence provided in the specification related to Fig. 1, element 20.);

a memory for storing discrete units of the video signal (Fig. 3B, element 132, Figs. 9A and 9B, element 258, 260, col. 6, line 38-41, "The web site 130 may store the audio and video received over data communication network 120 in digital storage unit 132 before providing it to the streamed outputs 116.", and line 46-57, "FIG. 3A shows remote sites 102, cameras 104, computer 134, video path 122, 129, control path 124, 126, 128, compressors 108, 114, 118, 136 data communication network 120, web site 140, digital storage means 132, and streamed video 116. As with FIGS. 1 and 2, remote sites 102 are filmed by camera 104. As with FIG. 1, the web site 140 is able to receive video tape 106, compress the audio and video in compression unit 108, and store the compressed audio and video 110. Audio and video from television stations may

also be compressed by compression unit 114 and stored or passed as streamed video 116, as in FIG. 1.", Note: The video signal coming from various sources are being stored individually.);

a compression circuit for compressing a plurality of the discrete units into a compressed video signal (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other

decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.);

a network interface circuit coupled to both the compression circuit (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which

may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.) and the computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web

server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", Note: Input is video signal, output is sent over internet, that is formatted for "IP" transmission.), and communicate the compressed video signal over the computer network to a remote computer (Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256."); and

an output (Figs. 9A and 9B, element 240) coupled to the computer network (Figs. 9A and 9B, element 242, 244).

Referring to claim 2,

Hendricks teaches an apparatus (Figs. 9A and 9B, element 140) for communicating graphics (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") across a computer network (Fig. 3A elements 104,134,106; Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

an input for receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional

feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed and provided to data communications network 120. This compressed video is subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples.".);

a memory for storing discrete units of the video signal (Fig. 3B, element 132, Figs. 9A and 9B, element 258, 260, col. 6, line 38-41, "The web site 130 may store the audio and video received over data communication network 120 in digital storage unit 132 before providing it to the streamed outputs 116.", and line

46-57, "FIG. 3A shows remote sites 102, cameras 104, computer 134, video path 122, 129, control path 124, 126, 128, compressors 108, 114, 118, 136 data communication network 120, web site 140, digital storage means 132, and streamed video 116. As with FIGS. 1 and 2, remote sites 102 are filmed by camera 104. As with FIG. 1, the web site 140 is able to receive video tape 106, compress the audio and video in compression unit 108, and store the compressed audio and video 110. Audio and video from television stations may also be compressed by compression unit 114 and stored or passed as streamed video 116, as in FIG. 1.", Note: The video signal coming from various sources are being stored individually.);

a compression circuit for compressing a plurality of the discrete units into a compressed video signal (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col.

13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.);

a network interface circuit coupled to both the compression circuit (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database

server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.) and the computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet

242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", Note: Input is video signal, output is sent over internet, that is formatted for "IP" transmission.), and communicate the compressed video signal over the computer network to a remote computer (Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be

transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.");

Referring to claim 3,

Hendricks teaches the apparatus of claim 2, wherein the video signal is in compliance with a Digital Visual Interface (DVI) standard.(col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.")

Referring to claim 4

Hendricks teaches the apparatus of claim 2, wherein the video signal is an analog video signal. (col. 3, line 41-55, "In accordance with the present invention,

video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.")

Referring to claim 5,

Hendricks teaches the apparatus of claim 2, further comprising a circuit for converting an analog video signal into a digital video signal. (col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be

decompressed and converted to analog, combined, and then converted to digital and compressed for transmission.", additionally also col. 15, line 28-34)

Referring to claim 7,

Hendricks teaches the apparatus of claim 2, wherein the computer network comprises a wide area network (WAN). (Figs. 9A and 9B, elements 242, "Internet"))

Referring to claim 8,

Hendricks teaches the apparatus of claim 2, wherein the network interface circuit is configured to format the compressed video signal into a plurality of Internet Protocol (IP) packets that are communicated over the computer network to the remote computer. (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site

140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", and Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch

270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. Input is video signal, output is sent over internet, that is formatted for "IP" transmission.),

Referring to claim 9,

Hendricks teaches the apparatus of claim 2, further comprising a second input for receiving a second video signal. (Figs. 3A and 3B, elements 104s, 122s, 106 and 114)

Referring to claim 10,

Hendricks teaches the apparatus of claim 9, wherein the compression circuit is further configured to separately compress a plurality of discrete units for each of the video signals.(Figs. 3A and 3B, elements 118, 136, 108, 114 and Figs. 9A and 9B, elements 108, 114, col. 13, line 15-27, as explained above in claim 1 and 2)

Referring to claim 11,

Hendricks teaches the apparatus of claim 2, wherein the network interface circuit is configured to format and communicate separately compressed video signals to different remote computers, such that a first remote computer receives a first compressed video signal and a second remote computer receives a second compressed video signal. (Fig. 10, elements 302 (a first remote computer receives a first compressed video signal), element 304 (a second remote computer receives a second compressed video signal), col. 15, line 46- col. 16, line 6, "(68) FIG. 10 shows how the users are connected to the web site, and shows an example of a communications network 125 (FIG. 8B) in detail. The connections shown in FIG. 10 apply to the web sites of the previous figures, including the web site 112 (FIG. 1), 130 (FIG. 2) and 140 (FIGS. 3 and 9). FIG. 10 shows a server platform 200, the internet 242, two direct connection 244, two traditional internet hosts 272, 274, two cable internet hosts 276, 278, a satellite-based internet host 280, a telephone dialup 282, an ISDN channel 284, a cable plant 286, 288, a satellite system 290 and a plurality of connected user terminals 302, 304, 306, 308, 310. In operation, the web site 112, 130, 140 may communicate over the internet 242 to a number of different systems. These systems include a traditional internet host 272, 274 and a cable headend internet host 276. The traditional internet host 272, 274 may be connected via a telephone line 282 or an ISDN channel 284 to a plurality of remote user terminals 302, 304, respectively. The cable internet host 276 may be connected via a cable plant 286 to a remote user 306. Alternatively, the web site is connected via

a direct connection 244 to a cable headend internet host 278 or satellite-based internet host 280. The cable headend internet host 278 communicates to a cable plant 288 and a remote user terminal 308. The satellite-based internet host 280 communicates via a satellite 290 to a user terminal 310. These direct connections 244 enable a higher data rate and use a high speed cable modem. It is advantageous that the communications equipment 240 (FIG. 9) enables communications with any type of user terminal no matter what the data rate or system. Of course, user terminals with higher data rates will receive higher quality audio and video images.")

Referring to claim 12,

The apparatus of claim 2, further comprising a plurality of network interface circuits (Fig. 10, element "WORLD WATCH LIVE WEB SITE" ELEMENTS 112, 130, 140), each network interface circuit being coupled to both a compression circuit (col. 15, line 46-51, "FIG. 10 shows how the users are connected to the web site, and shows an example of a communications network 125 (FIG. 8B) in detail. The connections shown in FIG. 10 apply to the web sites of the previous figures, including the web site 112 (FIG. 1), 130 (FIG. 2) and 140 (FIGS. 3 and 9)." Note: Please also note that Figs. 9A and 9B also have element 140 incorporating element 200.)and the computer network, each network interface circuit being configured to format and communicate the compressed video signal over the computer network to a remote computer (col. 15, line 51-57, FIG. 10 shows a server platform 200, the internet 242, two direct connection 244, two traditional internet hosts 272, 274, two cable internet hosts 276, 278, a

satellite-based internet host 280, a telephone dialup 282, an ISDN channel 284, a cable plant 286, 288, a satellite system 290 and a plurality of connected user terminals 302, 304, 306, 308, 310. ")

Referring to claim 15,

Hendricks teaches an apparatus (Figs. 9A and 9B, element 140) for communicating graphics (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") across a computer network (Fig. 3A elements 104,134,106; Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

an input for receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", Fig. 3A, element 104,

134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed and provided to data communications network 120. This compressed video is subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples.".); and

a network interface circuit coupled to both the input (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and

the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.) and the computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by

transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", Note: Input is video signal, output is sent over internet, that is formatted for "IP" transmission.), and

communicate the video signal over the computer network to a remote computer (Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.");

Referring to claim 16,

Hendricks teaches the apparatus of claim 15, wherein the network interface circuit is configured to format the video signal into a plurality of Internet Protocol (IP) packets that are communicated over the computer network to the remote computer. (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in

television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", and Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to

digital video servers 252, 252', 252", 252"'. In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. Input is video signal, output is sent over internet, that is formatted for "IP" transmission.),

Referring to claim 17,

Hendricks teaches the apparatus of claim 15, further comprising a second input for receiving a second video signal. (Figs. 3A and 3B, elements 104s, 122s, 106 and 114)

Referring to claim 18,

Hendricks teaches the apparatus of claim 15, wherein the network interface circuit is configured to separately format and communicate each received video signal to different remote computers, such that a first remote computer receives the a first video signal and a second remote computer receives a second video signal. (Fig. 10, elements 302 (a first remote computer receives a first compressed video signal), element 304 (a second remote computer receives a second compressed video signal), col. 15, line 46- col. 16, line 6, "(68) FIG. 10 shows how the users are connected to the web site, and shows an example of a communications network 125 (FIG. 8B) in detail. The connections shown in FIG. 10 apply to the web sites of the previous figures, including the web site 112 (FIG. 1), 130 (FIG. 2) and 140 (FIGS. 3 and 9). FIG. 10 shows a server platform 200, the internet 242, two direct connection 244, two traditional internet hosts 272, 274, two cable internet hosts 276, 278, a satellite-based internet host 280, a telephone dialup 282, an ISDN channel 284, a cable plant 286, 288, a satellite system 290 and a plurality of connected user terminals 302, 304, 306, 308, 310. In operation, the web site 112, 130, 140 may communicate over the internet 242 to a number of different systems. These systems include a traditional internet host 272, 274 and a cable headend internet host 276. The traditional internet host 272, 274 may be connected via a

telephone line 282 or an ISDN channel 284 to a plurality of remote user terminals 302, 304, respectively. The cable internet host 276 may be connected via a cable plant 286 to a remote user 306. Alternatively, the web site is connected via a direct connection 244 to a cable headend internet host 278 or satellite-based internet host 280. The cable headend internet host 278 communicates to a cable plant 288 and a remote user terminal 308. The satellite-based internet host 280 communicates via a satellite 290 to a user terminal 310. These direct connections 244 enable a higher data rate and use a high speed cable modem. It is advantageous that the communications equipment 240 (FIG. 9) enables communications with any type of user terminal no matter what the data rate or system. Of course, user terminals with higher data rates will receive higher quality audio and video images.")

Referring to claim 19,

Hendricks teaches a method (Figs. 9A and 9B, element 140) for communicating graphics (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a

computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") across a computer network (Fig. 3A elements 104,134,106; Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL") from a graphics card of a source computer (Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed and provided to data communications network 120. This compressed video is subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control

signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples." Note: Source computers, such as element 104, 134 and 106 are anticipated to have graphic cards as they have video signal acquiring and transmitting capabilities. Please also note that this inherency is consistent with the evidence provided in the specification related to Fig. 1, element 20.););

converting the video signal into a format (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch

270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. , Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), suitable for communication over a computer network

(Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", Note: Input is video signal, output is sent over internet, that is formatted for "IP" transmission.); and communicating the converted video signal across the computer network to a remote computer. (Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310)

Referring to claim 20,

Hendricks teaches the method of claim 19, wherein the step of converting comprises forming a plurality of Internet Protocol (IP) packets collectively embodying the video signal. (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by

videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", and Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit

262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. Input is video signal, output is sent over internet, that is formatted for "IP" transmission.).

Claim Rejections - 35 USC §103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or' described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the ad to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1) in view of Mou (US 7, 068, 596 B1)

Referring to claim 6,

Keeping in mind the teachings of Hendricks in claim 2 as stated above, Hendricks fails to teach the apparatus of claim 2, wherein the computer network comprises a local area network (LAN).

Mou teaches at Col. 5, line 48-64, "When a file is transmitted from the central server 112 to a client via the local server 102, the transmission and interactive control of the transmitted data may be performed in a manner to enable real-time streaming and therefore instantaneous access to the data by a requesting client. Alternatively, there may be a small or considerable delay, depending upon the transmission medium that is used. For instance, the transmission medium used to transmit data from the central server 112 to the local server 102, and from the local server 102 to each device 108 may include a

traditional transmission medium such as a cable modem connection. In a WAN setting, bandwidth cannot be guaranteed at a sustainable rate to support real-time broad-band video streaming. Thus, it is important to note that the benefit of the local server 102 in a LAN setting is to provide sustainable bandwidth to guarantee uninterrupted real-time video streaming (wherein the computer network comprises a local area network (LAN))".

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Hendricks and Mou in front of him at the time of invention was made, to implement the function and arrangement, of transmitting the video signals to a local server such as 102 of Mou because, as taught by Mou, the benefit of a the local server 102 in a LAN setting is to provide sustainable bandwidth to guarantee uninterrupted real-time video streaming.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1) in view of Boe (US 2002/0109975 A1)

Referring to claims 13 and 14,

Keeping in mind the teachings of Hendricks as stated in claim 2 above, Hendricks teaches a source computer that supplies the video signal (Figs. 3A and 3B, element 134), however Hendricks fails to teach the apparatus of claim 2, wherein the apparatus comprises a connector for direct connection, wherein the connector comprises signals carrying power signals for powering the apparatus, and the apparatus of claim 13, wherein the connector is an edge connector configured to directly plug into a card slot of a motherboard.

Boe teaches two important concepts , for one at para. [0003], "A typical arrangement for a computer system is to have a backplane circuit board, such as a motherboard, that serves as a platform on which the computer system may be built. The **motherboard** typically has a number of **sockets or slots** into which other circuit boards with components may be plugged to form **electrical** and mechanical connections between the circuit boards and the motherboard. Examples of circuit boards with components that may be plugged into the motherboard include one or more central processing units, main memory cards, **video adapter cards,** video acceleration cards, sound cards, SCSI controller cards, parallel or serial interface cards, game adapter cards, network cards, and others. Circuit boards with components such as these may plug into a motherboard through connectors along one edge of the circuit board. The edge connectors plug directly into a slot or socket(the connector is an edge connector configured to directly plug into a card slot of a motherboard.). When attached in this manner, the circuit board may be substantially perpendicular to the motherboard." Also, at para. [0033], "A power supply 5 is electrically connected to the second circuit board 2 through a power cable 6 as illustrated in FIG. 4. In other embodiments, power could be supplied through traces in a circuit board connected to a power supply rather than through a power cable.", and as indicated in Fig. 4 and para.[0029} second circuit board is motherboard and First (base) circuit board is upright board plugged into the mother board through edge connector supplying power through traces as indicated in para.[0033]. (connector comprises signals carrying power signals for

powering the apparatus, apparatus being the first (base) circuit board is upright board plugged into the mother board).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Hendricks and Boe in front of him at the time of invention was made, to implement the function and arrangement, as taught by Boe, of video adapter card receiving the power signal and video from the motherboard as the video adapter card having the edge connector directly plugged into the motherboard (the connector is an edge connector configured to directly plug into a card slot of a motherboard and connector comprises signals carrying power signals for powering the apparatus) as Hendricks has the personal computer as a source of video signal (Figs. 3 A and 3B, element 134) and a server (Figs. 9A and 9B, element 200) as follows: Boe's teachings makes suggestion and teaches the function and arrangement to one of an ordinary skill in art, to combine the personal computer as a source of video signal (Figs. 3 A and 3B, element 134 with integral compression circuit) into the Hendricks server (Figs. 9A and 9B, element 200) by adding the arrangement and functionality of Personal computer into the server such that the video from different sources as shown by Hendricks can be received directly into the web server rather than receiving through the network 120. This would been obvious because it creates the device providing the flexibility (which can be used as a server or personal computer) that can be used practically anywhere, such as on local area network or on wide area network, in conjunction with various sources of video signal providing devices.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ashok B. Patel
Examiner
AU 2154